of a new application for certification accompanied by the required fee and all information and test data required by parts 2 and 80 of this chapter or, for EPIRBs certificated prior to October 1, 1988, an application for modification accompanied by the required fee requesting such authorization, including appropriate test data and a showing that all units produced under the original certification authorization comply with the requirements of this paragraph without change to the original circuitry. If the intent is simply to add the proper label to an already approved and compliant EPIRB, a letter of notification prior to implementing the labeling requirements will be needed. This letter request should be sent to the attention of the Authorization and Evaluation Division, 7435 Oakland Mills Road, Columbus, Maryland 21046, attention EAB. The modulation, power and frequency stability requirements specified in paragraphs (a)(6), (a)(7) and (a)(8) of this section must be met under the environmental test conditions specified in subpart N, part 2 of this chapter.

(d) Vacuum tubes are not permitted in EPIRB's. The equipment must meet the requirements after extended periods of inaction while carried in vessels and subjected to the environmental conditions prescribed. Operation into any RF load from open to short must not cause continuing degradation in performance.

(e) EPIRBs must be powered by a battery contained within the transmitter case or in a battery holder that is rigidly attached to the transmitter case. The battery connector must be corrosion resistant and positive in action and must not rely for contact upon spring force alone. The useful life of the battery is the length of time that the battery can be stored under marine environmental conditions without the EPIRB transmitter peak effective radiated power falling below 75 milliwatts prior to 48 hours of continuous operation. The month and year of the battery's manufacture must be permanently marked on the battery and the month and year upon which 50 percent of its useful life will have expired must be permanently marked on both the battery and the outside of the transmitter. The batteries must be replaced if 50 percent of their useful life has expired or if the transmitter has been used in an emergency situation. EPIRBs manufactured after April 27, 1992 must display prominently on the outer case one of the following: The battery installation instructions, the title of the manual that contains such information, or the company name and address where the battery installation can be performed.

(f) The EPIRB must be waterproof and must not be accidentally activated by rain, seaspray, hose wash-down spray or storage in high humidity conditions. Standing water on the outer surface must not significantly affect its performance.

(g) Operating instructions understandable by untrained personnel must be permanently displayed on the equipment.

(h) The exterior of the equipment must have no sharp edges or projections. Means must be provided to fasten the EPIRB to a survival craft or person.

(i) The antenna must be deployable to its designed length and operating position in a foolpoof manner. The antenna must be securely attached to the EPIRB and easy to de-ice. The antenna must be vertically polarized and omnidirectional.

[51 FR 31213, Sept. 2, 1986; 52 FR 35246, Sept. 18, 1987, as amended at 53 FR 8905, Mar. 18, 1988; 56 FR 11516, Mar. 19, 1991; 63 FR 36607, July 7, 1998]

EFFECTIVE DATE NOTE: At 68 FR 46974, Aug. 7, 2003, §80.1053 was revised, effective October 6, 2003. For the convenience of the user, the revised text is set forth as follows:

### §80.1053 Special requirements for Class A EPIRB stations.

Class A EPIRBs shall not be manufactured, imported, or sold in the United States on or after February 1, 2003. Operation of Class A EPIRB stations shall be prohibited after December 31, 2006. New Class A EPIRBs will no longer be certified by the Commission. Existing Class A EPIRBs must be operated as certified.

### §80.1055 Special requirements for Class B EPIRB stations.

(a) A Class B EPIRB must meet the following:

(1) The EPIRB must be turned on automatically, as by water activated battery, or manually by an on-off switch. A positive means of turning the equipment off must be provided. Where an on-off switch is employed, a guard must be provided to prevent inadvertent operation;

(2) The equipment must be designed to be deployed, its controls actuated, or its antenna erected, each by a single action task which can be performed by either hand;

(3) Meet the requirements in §§ 80.1053(a) (4) through (8), (a)(14), and (c) through (i) of this part. EPIRBs with water activated batteries must, additionally, meet the requirements contained in §§ 80.1053 (a)(10) and (a)(11) of this part,

(4) Bear a designation that indicates it is a ''Class B'' EPIRB.

(b) A Class B EPIRB may have a manually activated test switch which meets the requirements in § 80.1053 (b) and (c).

(c) If testing of an EPIRB with Coast Guard coordination is not possible, brief operational tests are authorized provided the tests are conducted within the first five minutes of any hour and are not longer than three audio sweeps or one second whichever is longer.

[51 FR 31213, Sept. 2, 1986; 52 FR 35246, Sept. 18, 1987, as amended at 53 FR 8906, Mar. 18, 1988; 56 FR 11517, Mar. 19, 1991]

EFFECTIVE DATE NOTE: At 68 FR 46974, Aug. 7, 2003, § 80.1055 was revised, effective October 6, 2003. For the convenience of the user, the revised text is set forth as follows:

### § 80.1055 Special requirements for Class B EPIRB stations.

Class B EPIRBs shall not be manufactured, imported, or sold in the United States on or after February 1, 2003. Operation of Class B EPIRB stations shall be prohibited after December 31, 2006. New Class B EPIRBs will no longer be certified by the Commission. Existing Class B EPIRBs must be operated as certified.

### § 80.1057 Special requirements for Class C EPIRB stations.

Class C EPIRB's shall not be manufactured, imported, or sold in the United States after February 1, 1995. Class C EPIRB stations installed on board vessels before February 1, 1995, may be used until February 1, 1999, and not thereafter.

(a) A Class C EPIRB must operate on the frequencies 156.750 and 156.800 MHz, must use G3N modulation, and employ the international Radiotelephone Two Tone Alarm signal. The EPIRB transmission must be cycled. Each cycle must consist of 6 periods (T1 to T6) as shown in the table below. During T1, T2, T3, and T5 the 156.750 MHz and 156.800 MHz carriers must be modulated alternately by a 2200 Hz and a 1300 Hz tone.

The modulating duration of each tone must be 250 milliseconds. The maximum tolerance of the frequency and modulating duration of each tone must be ±5 percent. During T4 and T6 neither of the RF carriers must be emitted. The T4 and T6 time periods must be varied according to the predetermined schedule shown in the table below. After the last cycle the transmissions must be terminated. The EPIRB must be able to recycle its transmissions in accordance to the schedule shown in the table below by placing the activation switch to the ''off' and then ''on'' position.

| Period | Duration in seconds | Transmission frequency in MHz |
|---|---|---|
| $T_1$ | 1.5 | 156.800 |
| $T_2$ | 14.5 | 156.750 |
| $T_3$ | 1.5 | 156.800 |
| $T_4$ | 40.0 (16 cycles) | None. |
| $T_4$ | 80.0 (32 cycles) | |
| $T_4$ | 160.0 (64.2 cycles) | |
| $T_4$ | 320.0 (83.2 cycles) | |
| $T_5$ | 14.5 | 156.750 |
| $T_6$ | Sames as $T_4$ duration | None. |

(b) The effective radiated power must not be less than 1 watt. The power must be determined according to FCC Bulletin OCE 45. The EPIRB must meet the power requirements over each of the following temperature ranges for the time period shown below. Batteries may be replaced after completion of tests for each temperature range:

(1) 0 to +50 degrees Celsius for 24 hours continuous operation.

(2) −20 to 0 degrees Celsius for 12 hours continuous operation.

(c) The equipment must have a transmitter, an integral antenna and a power supply. The transmitter and power supply must be in separate compartments in a single watertight case.

(d) The equipment must be provided with a visible or audible indicator